

### **REMARKS**

Claims 1, 2, and 5, 7, 9-21 and 24-26 are pending in the present application. Claims 3, 4, 8, 22, and 23 are herein cancelled without prejudice. Claims 1, 2, and 5, 7, 9-19, and 21 are currently amended. Claims 1 and 20 are the independent claims.

### **Claim Rejections – 35 U.S.C. § 103(a)**

#### **Claims 1-11 and 16-2:**

Claims 1-11 and 16-23 were rejected under 35 U.S.C. 103(a) as obvious over the prior art discussed on pages 1-2 of the Specification, Japanese Patent Application Publication No. JP 11-69319 (Tokkaihei), [cited in the Office Action as "applicant admitted prior art"], which Applicants note corresponds to the patent family member U.S. Patent No. 7,111,315, in view of Program and System Information Protocol for Terrestrial Broadcast and Cable, Doc. A/65 [hereinafter "Doc. A/65"]. Applicants respectfully traverse this rejection.

Applicant respectfully suggests that if Japanese Patent Application Publication No. JP 11-69319 (Tokkaihei) is used in a further office action as a prior art reference that it may be more accurate to identify any prior art teachings by direct citation to the reference itself, rather than to interpret Applicant's interpretation of the reference, noting that the document itself is the best evidence of its teachings.

Applicant initially notes that claims 3, 4, 8, 22, and 23 have been cancelled herein without prejudice. Additionally, Claims 1, 2, 5-7, 9-19, and 21 have been amended to remove the claims language under 35 U.S.C. 112, sixth paragraph. Additionally, Claim 5 has been amended to incorporate a feature originally specified in Claim 7. Claim 6 has been amended for greater clarity. Claim 21 has been amended to incorporate a feature originally specified in Claim 23. No new matter has been added to the claims.

Applicants respectfully submit that the combination of “applicant admitted prior art” and Doc. A/65 fails to disclose every claimed feature in claims 1, 2, 5-7, 9-11, and 16-21. In order to establish *prima facie* obviousness, all claim limitations must be taught or suggested in the prior art. See, *In re Royka*, 180 USPQ 580 (CCPA 1974).

Regarding Independent Claims 1 and 20:

Applicants acknowledge that the prior art discussed on pages 1 and 2 of the Specification disclose the prior art of an input terminal, and editor, computer memory storage, a table generation unit to generate program guide tables, and transmission of those tables at predetermined intervals via transport stream packets. However, as also noted in the Specification: “A problem with a prior art electronic program guide providing device constructed as above is that since it generates all various tables which constitute the electronic program guide, such as NIT, SDT, and EIT, and sends them to outside the electronic program guide providing device at predetermined intervals even when only a part of the EPG information is updates, the device is put on an enormous load.” See, Specification, page 2.

Independent Claim 1, as currently amended, specifies features beyond that of the prior art, specifically, as follows:

said table generation unit also determines which of said plurality of electronic program guide information tables needs to be regenerated based on said update information generated by said editor unit and regenerates only those electronic program guide information tables that are determined to need updating by using the electronic program information stored in said electronic program information storage unit;

wherein the first table of events is separately regenerated at a time different from the second table of events.

See, Independent Claim.

The Office Action acknowledges that the prior art cited in the specification, does not disclose generating only those electronic program guide information tables that are

determined to need updating by using the electronic program information stored in said electronic information storage [unit]. See, Office Action, page 6. The Office Action cites Doc. A/65 as teaching the missing feature.

Applicants respectfully submit that Doc. A/65 does not teach or suggest updating only those information tables that are determined to need updating using the stored electronic program information. As Applicants read Doc. A/65, it is understood to require that the decoder monitor or poll the Master Guide Table (MGT), and when it detects a change in the version number of a table contained in the MGT it assumes that the table has changed and then reloads it. See Doc. A/65, pages 73 and 76. As taught in Doc. A/65, updating is done by the decoder when the decoder detects that the version number of a table has been changed at the MGT level. In contrast, the table generation unit of the present application actively sends to the decoder an updated and regenerated table. The present application does not depend on constant monitoring by the decoder device.

Even though the decoder may identify the update of one table, Applicants read Doc. A/65 as requiring that a plurality of tables be downloaded along with the updated table. Doc. A/65 describes that a new Virtual Channel Table (VCT) may be updated at any time by increasing the version number by one. See Doc. A/65, page 77. Similarly, Doc. A/65 states that it is possible to regenerate a single Event Information Table (EIT) by updating the version number of the table in the MGT. See Doc. A/65, page 73.

Applicants read the other sections of Doc. A/65 as requiring that not only the updated tables be transmitted, but also additional tables. See, Doc. A/65, page 74, stating "the minimum amount of information required in an AGSC Terrestrial Digital Transport Stream is the VCT, the MGT, the RRT, the STT, and the first four EITs." Similarly, Doc. A/65 states: "as a minimum, the first four EITs must always be present in every Transport Stream." See, Doc. A/65, page 72. Applicants therefore read Doc. A/65 as teaching that certain tables may be updated at any time by changing the

version number, but the transmission of the table information must be accompanied by additional tables. This appears to be part of the requirement of the polling process. In contrast, there is no requirement that additional tables be transmitted with upgraded tables in the present invention. In fact, it is this ability on the editor unit side to update tables by transmitting merely the updated table itself is one of the features that distinguishes the present invention over the prior art.

Applicants respectfully submit that independent Claim 20 recites method features which are substantially similar to the apparatus of Claim 1, and are allowable at least for the same reasons submitted in support of the allowance of Claim 1, above.

Regarding Dependent Claims 2, 11, 17, and 19:

Dependent Claim 2 depends from independent Claim 1 and specifies a unit for storing update information as generated by the editor unit. Applicants respectfully submit that the specified "update information storage unit" as a feature in combination with the features of Claim 1 is not taught or suggested in either the admitted prior art or Doc. A/65. The feature of an update information storage unit is further refined in dependent Claims 11, 17, and 19. The Applicants respectfully submit that the prior art cited in the Office Action fails to teach or suggest all of the elements of Claims 11, 17, and 19.

Further regarding dependent Claim 11: The prior art references, "admitted prior art" and Doc. A/65, individually or in combination, fail to teach or suggest the following: "wherein said device includes a plurality of editor units, and each of said plurality of editor units inspects update information generated by any other editor units stored in said update information storage unit."

Further regarding dependent Claim 17: The prior art references, "admitted prior art" and Doc. A/65, individually or in combination, fail to teach or suggest the following:

A plurality of table generation units sharing the load of generating electronic program guide information tables.

Further regarding dependent Claim 19: The prior art references, "admitted prior art" and Doc. A/65, individually or in combination, fail to teach or suggest the following: wherein the table generation unit, "when updating an electronic program information guide table, provides the updated electronic program information guide table at the same time it updates the electronic program guide information table."

Further regarding dependent Claims 2, 11, 17, and 19, Applicants respectfully submit that dependent Claims 2, 11, 17, and 19 are allowable at least based on the allowability of independent Claim 1 from which they depend.

Regarding Dependent Claims 5-7, 9, and 10:

Dependent Claim 5, as currently amended, depends from independent Claim 1, and specifies, in relevant part, as follows: "wherein said table generation unit sets the length of predetermined intervals of the only one or more electronic program information tables that need to be updated." As disclosed in the specification, "setting the length of predetermined intervals" is beyond merely making the updates at a set or new time, but rather changes the update intervals entirely. See, Disclosure, pages 20-21, and Figure 5. Applicants respectfully submit that "admitted prior art," Doc. A/65, or Thomas, alone or in combination, fail to teach or suggest a table generation unit with this feature.

Dependent Claim 6, as currently amended, depends from Claims 2 and 1, and specifies: "wherein said table generation unit updates only one or more of a plurality of electronic program information tables that need to be updated at predetermined intervals." Applicants respectfully submit that this feature, in combination with the features of the claims upon which Claim 6 depends, is nowhere taught or suggested by the cited prior art references, and therefore, the prior art references fail to teach or suggest every element of the claim, and the claim is therefore allowable.

Dependent Claim 7, as currently amended, depends from Claims 5 and 1, and specifies: "wherein said table generation unit sets the length of predetermined intervals according to a sending frequency of an electronic program information table with the largest sending frequency." Applicants respectfully submit that this feature is nowhere taught or suggested by the cited prior art references, and therefore, the prior art references fail to teach or suggest every element of the claim, and the claim is therefore allowable.

Dependent Claim 9, as currently amended, depends from Claims 5 and 1, and specifies "wherein said table generation unit sets the length of predetermined intervals according to a sending frequency of each of the one or more electronic program information tables." Applicants respectfully submit that this feature is nowhere taught or suggested by the cited prior art references, and therefore, the prior art references fail to teach or suggest every element of the claim, and the claim is therefore allowable.

Dependent Claim 10, as currently amended, depends from Claim 2, and incorporates the same feature as Dependent Claim 5, discussed above, and it is respectfully submitted that Claim 10 is allowable at least for the same reasons are argued above for allowance of Claim 5.

Further regarding dependent Claims 5-7, 9, and 10, Applicants respectfully submit that dependent Claims 5-7, 9, and 10 are allowable at least based on the allowability of independent Claim 1 from which they depend.

Regarding Dependent Claim 16:

Dependent Claim 16, as currently amended, specifies in relevant part, "a plurality of table generation units" that share the load of generating the electronic program guide information tables. See, Figure 8, and Specification, pages 29-30. Applicants respectfully submit that "admitted prior art," Doc. A/65, or Thomas, alone or in

combination, fail to teach or suggest a plurality of table generation units with this feature.

Further regarding dependent Claim 16, , generally, Applicants respectfully submit that dependent Claim 16 is allowable at least based on the allowability of independent Claim 1 from which it depends.

Regarding Dependent Claim 18:

Applicants respectfully submit that dependent Claim 18 is allowable at least based on the allowability of independent Claim 1 from which it depends.

Regarding Dependent Claim 21:

Dependent Claim 21 depends from independent Claim 20, and specifies: "wherein generating the updated electronic program guide information tables occurs at predefined intervals, and wherein the predefined interval is set for each of the plurality of electronic program guide information tables." As disclosed in the specification, setting the length of predetermined intervals is beyond merely making the updates at a set or new time, but rather changes the update intervals entirely. See, Disclosure, pages 20-21, and Figure 5. Applicants respectfully submit that "admitted prior art," Doc. A/65, or Thomas, alone or in combination, fail to teach or suggest a table generation unit with this feature.

Further regarding dependent Claim 21, Applicants respectfully submit that Claim 21 is allowable at least based on the allowability of independent Claim 20 from which it depends.

**Claims 12-15 and 24-26:**

Claims 12-15 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over "admitted prior art" in view of Doc. A/65, and further in view of Thomas, et al. (U.S. Patent 5,666,654)[hereinafter "Thomas"]. Applicants respectfully traverse this rejection.

Applicants respectfully submit that the combination of "admitted prior art," and Doc. A/65, and Thomas fails to disclose every claimed feature in claims 12-15 and 24-26. In order to establish *prima facie* obviousness, all claim limitations must be taught or suggested in the prior art. See, *In re Royka*, 180 USPQ 580 (CCPA 1974).

The Office Action acknowledges that the "admitted prior art" and Doc. A/65 do not teach or suggest the feature of "wherein said update information storage means stores histories of the update information generated by said editing means, and said editing means restores the electronic program information stored in said electronic program information storage means to the state it was prior to any updating done by said editing means with reference to the histories of the update information stored in said update information storage means if necessary." See, Office Action, page 9. The Office action cites Thomas as supplying these limitations in combination with the other cited prior art. See, Office Action, page 9.

In general, as applied to Claims 12-15 and 24-26, Applicants respectfully submit that Thomas fails to teach or suggest the features identified in the Office Action. The Office Action cites to Thomas (Fig. 8, col. 8, lines 9-46, and col. 12, lines 28-61). Col. 8, lines 9-46, discloses a "database validation subsystem," which checks data prior to being downloaded to check for potential problems with the data, such as being overly long, having holes or overlaps of data, inappropriate language, missing price, missing titles, or missing promotional copy. See, Thomas, col. 8, lines 22-28 and 35-41 [emphasis added]. The validation checking is done: "At some time prior to the creation



of a feed or edition.” See, Thomas, col. 12, lines 30-34 [emphasis added]. Similarly, it is taught in Thomas that: “Status and control subsystem 60 monitors the generation of the feed for errors and performance statistics.” See, Thomas, col. 12, lines 57-61 [emphasis added]. In general, Applicants read Thomas as teaching a mere data validation checker. See, Thomas, Fig. 8, col. 8, lines 9-46, and col. 12, lines 28-61.

Regarding dependent Claims 12 and 15:

Dependent Claim 12, as currently amended, further limits dependent Claim 2, in part, as follows: “wherein said update information storage unit stores histories of the update information generated by said editor unit,” and that the “editor unit restores the electronic program information stored in said electronic program information storage unit to the state it was prior to any updating done by said editor unit with reference to the histories of the update information stored in said update information storage unit if necessary.” See, Claim 12. Dependent Claim 15, as currently amended, further specifies the apparatus of the update information storage unit and the stored update histories.

Applicants find no teaching or suggestion of an “update information storage unit” storing “update information” as generated by the editor unit in “admitted prior art,” Doc. A/65. or Thomas, either individually or in combination. Therefore, Applicants respectfully submit that the cited prior art references fail to teach or suggest all of the elements of the claim, and are therefore allowable.

Regarding dependent Claims 13 and 14:

Dependent Claim 13, as currently amended, further limits independent Claim 1, in relevant part, by specifying the following: “wherein when the table generation unit determines that there is something wrong in the generation of the program guide table, it notifies the editor unit of the error and is able to restore the electronic program

information to its prior state using the history stored in the update information storage unit.

Further regarding dependent Claims 12-15, generally, Applicants respectfully submit that dependent Claims 12-15 are allowable at least based on the allowability of independent Claim 1 from which they depend.

Regarding dependent Claim 24:

Applicants respectfully submit that dependent Claim 24 is allowable at least based on the allowability of independent Claim 20 from which it depends.

Regarding dependent Claim 25:

Dependent Claim 25, further limits independent Claim 24, in relevant part, by specifying the following: "notifying the sender if the received edited electronic program guide information is determined to cause an error."

The Office Action cites generally to the prior art references of "admitted prior art," Doc. A/65, and Thomas as teaching or suggesting the features of dependent claim 25, but does not cite or discuss the feature of "notifying the sender if the received edited electronic program guide information is determined to cause an error." Applicant does not find this feature in the cited prior art references. Therefore, Applicant respectfully submits that the cited prior art references fail to teach or suggest each and every feature of the claimed invention, and that the claim is therefore allowable.

Regarding dependent Claim 26:

Dependent Claim 26, further limits independent Claim 25, in relevant part, by specifying the following: "restoring the stored edited electronic program guide information to a state prior to receiving the edited electronic program guide information

based on the stored history," and including the feature from claim 25 of "notifying the sender if the received edited electronic program guide information is determined to cause an error," and the other elements of the claims upon which claim 26 depends.

The Office Action cites generally to the prior art references of "admitted prior art," Doc. A/65, and Thomas as teaching or suggesting the features of dependent claim 26 but does not cite or discuss the feature of "notifying the sender if the received edited electronic program guide information is determined to cause an error." Applicant does not find this feature in the cited prior art references. Therefore, Applicant respectfully submits that the cited prior art references fail to teach or suggest each and every feature of the claimed invention, and that the claim is therefore allowable.

Further regarding dependent Claims 24-26, generally, Applicants respectfully submit that dependent Claims 24-26 are allowable at least based on the allowability of independent Claim 20 from which they depend.

### **Conclusion**


In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael K. Mutter Reg. No. 29,680 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,



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